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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/526,409	03/02/2005	Tomoo Takazawa	36856.1323	3092

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EXAMINER

HA, NGUYEN T

ART UNIT	PAPER NUMBER
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2831

DATE MAILED: 12/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/526,409

Applicant(s)

TAKAZAWA, TOMOO

Examiner

Nguyen T. Ha

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 March 2005 and 03 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 22-27 is/are allowed.
- 6) ☒ Claim(s) 8-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>0305, 0906, 1106</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 8-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Uchida et al. (US 6,762,925).

Regarding claim 8, Uchida et al. disclose a monolithic ceramic electronic component (figures 5-6) comprising:

- a first element portion including a laminate of ceramic layers and internal electrodes (30), and
- a second element portion including a laminate of ceramic layers and internal electrodes (31), wherein
- at least the first element portion and the second element portion are stacked to define a ceramic laminate (figure 6), and a porosity of the ceramic layers of the first element portion is different from a porosity of the ceramic layers of the second element portion (figure 5).

Regarding claim 9, Uchida et al. disclose the first element portion includes a first coil (26) defined by the internal electrodes thereof being electrically connected together,

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the second element portion includes a second coil (27) defined by the internal electrodes thereof being electrically connected together, and the first coil and the second coil are electrically connected to define an inductor (figure 6).

Regarding claim 10, Uchida et al. disclose the first element portion includes a coil defined by the internal electrodes thereof being electrically connected together, the second element portion includes a capacitor in which any two adjacent electrodes are separated by a ceramic layer, the porosity of the ceramic layers of the second element portion is lower than the porosity of the ceramic layers of the first element portion, and the coil and the capacitor are electrically connected to defined an LC filter (figure 6, column 11, lines 51-54).

Regarding claim 11, Uchida et al. disclose the ceramic layers of the first element portion and the ceramic layers of the second element portion are made to the same ceramic material (column 5, lines 64-67).

Regarding claim 12, Uchida et al. disclose the ceramic layers of the first element portion are made of low-permeability ceramic green sheets are the ceramic layers of the second element portion are made of high-permeability ceramic green-sheets (column 7, lines 42-46).

Regarding claim 13, Uchida et al. disclose the ceramic layers of the first element portion have a relatively small number of pores and the ceramic layers of the second element portion have a relatively large number of pores (column 9, lines 18-20, and table 2).

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Regarding claim 14, Uchida et al. disclose the first element portion has a high permeability and a high dielectric constant, and the second element portion has a low permeability and a low dielectric constant (column 7, lines 42-48).

Regarding claim 15, Uchida et al. disclose an inductance of the first coil in the first element portion is lower than an inductance of the second coil in the second element portion (figure 6).

Regarding claim 16, Uchida et al. disclose a stray capacitance formed in parallel with the first coil of the first element portion is smaller than a stray capacitance formed in parallel with the second coil of the second element portion (figure 6).

Regarding claim 17, Uchida et al. disclose a resonant frequency of the first element portion is higher than a resonant frequency of the second element portion (column 10, lines 46-52).

Regarding claim 18, Uchida et al. disclose a winding direction of the first coil is opposite to the second coil (figure 6).

Regarding claim 19, Uchida et al. disclose the porosity of the first element portion is about 30% to about 80% and the porosity of the second element portion is about 10% or less (column 9, lines 8-66).

Regarding claim 20, Uchida et al. disclose the porosity of the first element portion is about 20% and the porosity of the second element portion is about 60% (column 9, lines 8-66).

Regarding claim 21, Uchida et al. disclose the monolithic ceramic electronic component is one of a monolithic inductor, a monolithic impedance component, a

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monolithic LC filter, a monolithic capacitor, and a monolithic transformer (column 5, lines 7-15).

Allowable Subject Matter

3. Claims 22-27 are allowed.

The following is an examiner's statement of reasons for allowance:

With respect to claims 22-27, the prior art alone or in combination does not teach the limitation of a method for making a monolithic ceramic electronic component comprising: an amount of granular evaporative pore-forming agent incorporated into a ceramic slurry for forming the ceramic layers of the first element portion is different from an amount of the granular evaporative fore-forming agent incorporated in to a ceramic slurry for forming the ceramic layers of the second element portion so that the first element portion and second element portion have different porosities of ceramic layers.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Citation Relevant of Prior Art

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Azuma et al. (US 6,803,839) disclose multilayer LC composite component.
- b. Hayashi (US 6,477,031) discloses electronic component for high frequency signal and method for fabricating the same.

- c. Nakata et al. (US 6,476,690) disclose laminated LC component.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nguyen T. Ha whose telephone number is 571-272-1974. The examiner can normally be reached on Monday-Friday from 8:30AM to 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on 571-272-2800 ext. 31. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NGUYEN T. HA
PRIMARY EXAMINER

NH

December 7, 2006